Missouri Department of Transportation



105 West Capitol Avenue P.O. Box 270 Jefferson City, MO 65102 (573) 751-2551 Fax (573) 751-6555 www.modot.org

Dave Snider, P.E., Interim Director

March 29, 2004

Honorable Ike Skelton Member of Congress 2206 Rayburn Building Washington, D.C 20515

Dear Congressman Skelton:

In regard to your inquiry on the events surrounding the elevation error on the Lexington Bridge, we offer the following.

HNTB is the consultant designer of record on the project. The piers for the bridge were contracted to Edward Kraemer and Sons, Inc. and this work is complete. The bearing and girder erection was contracted to Jensen Construction Company and had a calendar completion date of August 1, 2003. The final contract is with OCCI for placement of the bridge deck.

The elevation error on this project was discovered on January 24, 2004. In reviewing the survey data, our resident engineer discovered that some of the girders were low with the worst location approximately 6 inches low. Jensen was immediately notified of the problem and that corrective action was required. MoDOT and HNTB began looking into the nature of the problem and determined the bearings were lower than the plans called for. The bearing manufacturer noted the difference in their bearing design height from the plans. We found that Jensen should have made height adjustments to the bearings by shimming them with steel plates or other means to assure the final bearing elevation was correct. The end result is that the total bearing height was shorter than the plan required, which in turn caused the girder elevations to be low. Jensen has admitted the error is their responsibility.

When an error such as this is discovered, it is the contractor's responsibility to submit a plan of correction rather than for MoDOT to direct a solution. We then review the proposal to ensure the structural integrity and overall quality of the bridge is not affected by the solution. This method does two things. First, it puts the responsibility for the corrective action primarily on the contractor, and second, it prevents a contractor claim for MoDOT directing means and methods of construction. Unfortunately, this approach can take several weeks to reach a resolution, especially with an error of this magnitude.

There are two acceptable corrections to this problem. The first is to raise the girders and place shims under the bearings to raise them to the correct height or replace the entire bearing assembly. This option would take a minimum of two months due to the complexity of the

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operation and the weight of the girders. There are also risks involved such as potential damage to the piers or girders, which could further prolong the construction of the bridge. The second option is to change the profile grade of the bridge. In simple terms, parts of the deck will be constructed thicker to adjust for the elevation differences. Jensen has elected to go with the second option and submitted a preliminary plan to MoDOT. In addition, they are contracting with HNTB to work out the details of their proposal and to ensure it is an acceptable solution.

Once the engineering concerns are addressed, the proposal will be sent to OCCI for their constructability review and cost estimate. We anticipate this to take place the first week of April. Jensen has been put on notice that any direct costs associated with the delay caused by their error are their responsibility. They are responsible for all of HNTB's review costs and any direct cost to OCCI for changes in their original scope of work. MoDOT will continue to charge liquidated damages of \$5,000 per day. Additionally, we are reviewing to see if delay impacts to OCCI can also be assessed. Jensen has been charged over \$490,000 in liquidated damages to date. The late completion is also being counted toward their contractor performance rating.

Due to this delay and previous delays by Jensen, we anticipate a completion date no later than the summer of 2005. MoDOT is reviewing all options to open the bridge by the original completion date of November 1, 2004, and to avoid having to use the existing bridge through another winter. We are committed to frequent inspections of the existing bridge and timely repairs to insure the safety of the traveling public.

Please do not hesitate to contact my office if you need additional information on this matter.

Sincerely,

Dave Snider, P.E. Interim Director

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cc: Kevin Keith-do

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Jay Wunderlich-ga